terest connected with the operation in the cases described. Of the cases of *albuminuria*, 2 were purged by the powdered squill without any increase in the secretion of urine; in the third case, where the wine of squill was employed, a diuretic effect followed; but in all three cases, the albumen in the urine was unaffected. In one of the cases of *abdominal dropsy*, where the powder proved diuretic and laxative, the dropsy was removed in less than two months.

The reply of Dr. Chateau to the question of the Academy is: "*That squill has a direct hyposthenic action upon the ganglionic and cerebro-spinal systems, and that this action is exhibited at first by an increase of the urinary and intestinal secretions, and at last, if the dose of the drug be large, by paralysis and death.*"

Dr. Chateau prefers the powder for internal administration, next to this the wine of squill, and as an expectorant, the oxymel. He considers 10 to 15 centigrammes (from 1½ to 2¼ grains) a good *dose* to commence with, and that it may be increased, after some days, to 35 or 40 centigrammes (5¼ to 6 grains). —*B. and F. Med.-Chirurg. Rev.* July, 1854, from *Archives Générales*, Jan. 1854.

8. *On Delphinin.*—The deficiency of our knowledge respecting the properties and operation of the alkaloid delphinin, has led Dr. LEONIDES VAN PRAAG to their new and complete investigation. The delphinin which was employed in the experiments whose results we are about to detail, was obtained from Messrs. Frommsdorf, of Erfurt.

Dr. J. L. Van Praag administered the alkaloid to animals from each class of the vertebrata, and in the paper under our notice, gives the results of his observations on fishes, frogs, birds, and mammalia, and relates at length the experiments which he instituted. The mammals which he selected for experiment were dogs, cats, and rabbits. In these, asphyxia, as a result of paralysis of the heart (*Herzlähmung*), was among the principal phenomena; whilst paralysis (*Lähmung*) of the nerves of motion, and, at a later period, of those of secretion and the special senses followed. Dogs were least of all affected when the poison was given to them in a piece of meat, since the two were soon vomited together. It operated more powerfully when it was administered by the anus, or introduced into a wound of the integument. But death followed almost suddenly, so that scarcely a minute intervened, upon injection into a vein, from arrest of the heart's action; the animals, in consequence of discontinuance of respiration, gasp for breath with open mouth, and in a short time death follows, in the midst of severe tetanus. On injection of the alcoholic solution into the anus in dogs, repeated evacuation of feces at first occurred, and then salivation. The walk became staggering and uncertain. There arose great adynamia, in consequence of which they leaned against anything for support, until at last they fell down. The sensibility of the skin diminishes simultaneously with the lessening power of the motor nerves, until anæsthesia is complete. The respiration is at first increased, panting and accompanied by howling; in addition to this, tenacious, clear mucus accumulates in the glottis and larynx, which renders respiration still more difficult. At a later period, the frequency of respiration diminishes, until at last the act occurs very rarely, or ceases altogether. The functions of the brain and of the organs of the senses are little affected, until the disturbance of the circulation and respiration increases. In the instance of cats, into whose anus the alcoholic solution was injected, the evacuation of feces and flow of saliva were also increased, and there were observed, at first, frantic and wild leaps, the symptoms of adynamia occurring at a later period. The phenomena of the circulation and respiration are the same as in dogs, and both cats and dogs show signs of a tickling sensation in the mouth. In rabbits, also, after the injection into the anus, active and strong symptoms of reaction appear, as in cats, terminating, however, in adynamic symptoms. When the delphinin, in a fatal dose, was introduced, in cats, into the subcutaneous cellular tissue of the back, the poison operated first of all on the sensory nerves at this spot, and induced symptoms resembling those arising from a powerful irritant. The animals exhibited great disquiet, bristled up their hair, set up their back, rolled on their back, and finally lay down. Gradually, however, in this case also, the action of the poison upon the heart and lungs appeared. When, in the instance of dogs, the poison was given dry with the food, the operation of the poison soon became apparent upon the mucous membrane; there were observed vomiting, and an excessive itching in the mouth, so that the animals rubbed their lips and mouth with their feet, and rubbed their nose upon the ground. With this, also, arose profuse salivation. The principal points observed on dissection of the poisoned animals were, fulness with blood of the membranes of the brain, of the heart, of the larger venous trunks, and of the liver; fulness of the gall-bladder, and a collection of mucus in the air-passages. Nothing was noticed respecting the condition of the kidneys. In one case, air was found in the veins of the membranes of the brain.—*B. and For. Med.-Chirurg. Rev.* July, 1854, from *Archiv. für Pathol. Anat. und Physiol. und für Klinische Medicin*, Bd. vi. Heft 3.

9. *Comparison between Chloroform and Cold as Anæsthetics.*—By James Arnott, M. D. The last number of the *Medical Times and Gazette* records another death from chloroform. Within the last three months, three deaths have happened from the same cause in the London hospitals alone, and in the hands of careful men, experienced in the use of this agent. Yet, as the fatality is small in comparison with the number of cases in which chloroform is used, every one *hopes* that such an event will not happen in *his* hands. Is it proper, however, to incur any amount of risk when the same object—the prevention of pain—can be attained by other means perfectly devoid of danger, and possessing many other advantages? Does not the surgeon err who continues to use chloroform unnecessarily, even should he himself never so cause death, by countenancing the employment of a measure that every month proves fatal in the hands of some other surgeon? Does he not, in fact, so participate in causing these deaths? It is merely a question of time. The moment some eminent patient dies from chloroform, unnecessarily administered, that moment will it be deemed imperative to substitute a safer anæsthetic. Why should not this time be anticipated, and such an event prevented? Why should not a stop be at once made to the afflicting mortality from this cause? For what can be more distressing to the relatives of a person so killed, or to the surgeon who administers the fatal poison, than the consciousness that its administration was altogether unnecessary.

Benumbing cold has been proved to be a safe and perfect anæsthetic in the immense majority of surgical operations. It would have prevented death in more than three-fourths of the fifty or sixty cases that have proved fatal from the use of chloroform. Among others who have afforded evidence of these powers of intense cold, I may mention M. Velpeau, in France, and Mr. Paget, in this country. The French journals have at various times reported M. Velpeau's use of cold for this purpose in the *Hôpital La Charité;* and the *Medical Times and Gazette* of the 1st inst. reports an operation in which it was successfully employed by Mr. Paget. In a paper, in the *Medical Times and Gazette* of the 25th of March, I have mentioned how cold is applied to produce anæsthesia; the design of the present communication is to make a comparison between it and chloroform.

It is commonly supposed that the application of benumbing cold must be a difficult and troublesome proceeding; much more so, in both respects, than the administration of chloroform. The very contrary is the truth. Whether the cold is applied by keeping in contact with the part, for a few seconds, a refrigerating mixture of ice and salt, contained in a gauze bag or a thin metallic vessel, or by touching it with a thick piece of copper that has been dipped in such a mixture, nothing can be easier; and it is impossible to fail. Different from chloroform, the anæsthetic effect is complete within a minute; and, as it has no unpleasant consequences, the surgeon is released from those protracted attentions which he is so often called upon to give in allaying the nervous symptoms that frequently follow the administration of chloroform. He requires no assistant; and, as the anæsthetic brings no new danger of its own, his mind is undisturbed, during the operation, from the anxiety which he would suffer from chloroform on this account.

The expense of either plan is so trifling that it does not deserve mention with